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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,335	11/20/2001	Kenneth C. Budka	29250-000563 / US	1276
30594	7590	08/25/2004	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			SOBUTKA, PHILIP	
P.O. BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	
			2684	

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,335

Applicant(s)

BUDKA ET AL. *AL*

Examiner

Philip J. Sobutka

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-32 is/are allowed.
- 6) ☒ Claim(s) 1,2,10-12,16,17 and 24 is/are rejected.
- 7) ☒ Claim(s) 3-9,13-15 and 18-23 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1,10,11,12,16,17,24 are rejected under 35 U.S.C. 102(e) as being anticipated by Ariyoshi et al (US 2002/0021682).

Consider claims 1,16,17. Ariyoshi teaches a method for determining an uplink transmit power level at which to transmit a current data block over a radio link from at least one of a plurality of mobile stations to a base transmitter station (Ariyoshi para. 2), comprising: (a) evaluating air link quality measurements within the radio link over a measurement interval, wherein each time a message is sent to the mobile station, it is evaluated whether a specified number of uplink blocks have been transmitted by the mobile station since the start of the measurement interval, note that Ariyoshi describes the TTI, which is the interval used to determine the Block Error rate (Ariyoshi, figs 1,3, paras. 2, 32); and (b) determining a transmit power level that the mobile should be using for the current block based on the evaluated air link quality measurement, wherein transmit power is adjusted for the current block, if necessary, based on the determined transmit power (Ariyoshi see especially para. 33,34).

As to claims 10,24, note that Ariyoshi teaches assessing the received quality of individual blocks in the base transceiver station, and if the quality is very poor within a first polling interval, sending a message commanding a higher mobile transmit power from the mobile station (Ariyoshi see especially para. 33,34).

As to claim 11, note that of course the block would be transmitted at the adjusted transmit power level.

As to claim 12, note that if the errors were greater than or equal to a predetermined parameter, a message would be sent commanding higher mobile transmit power from the mobile station (Ariyoshi see especially para 33-35).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ariyoshi in view of Mizell (US 6,731,617).

Consider claim 2. Ariyoshi teaches everything claimed as shown above except for the base transmitter station and mobile stations being part of a general packet radio service (GPRS) system. Mizell teaches that GPRS complement mobile service by providing constant data connections at high speeds (Mizell col 1, lines 15-38).

It would have been obvious to one of ordinary skill in the art to modify Ariyoshi to have the base and mobile use GPRS in order to provide constant data connections at high speeds.

Allowable Subject Matter

6. Claims 28-32 are allowed.

Consider claim 28. The nearest prior art as shown in Ariyoshi fails to teach, in a GPRS system, a closed-loop power control method wherein a first algorithm informs a second algorithm about a weakest coding scheme that is to be used over an air link, in a next measurement interval, between at least one target mobile station and a base station of the system, and wherein the second algorithm selects target mobile BER or target mobile C/I based on the information from the first algorithm, and sets a flag for when attenuation to be used in the next measurement interval exceeds a preset threshold.

7. Claims 3-9,13-15,18-23,25-27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Consider claim 3. The nearest prior art as shown in Ariyoshi fails to teach the method of claim 1 wherein step (b) further includes using BER based and block error rate (BLER)-based power step calculation techniques to determine how much to adjust the mobile station's transmit power.

Consider claim 13. The nearest prior art as shown in Ariyoshi fails to teach the method of claim 1, wherein the method employs no timers, but is driven or initiated by at least one external event selected from the group comprising temporary block flows (TBF), receipt of an uplink block of data, transmission of a packet uplink acknowledgement/negative acknowledgement message, transmission of a TBF reassignment message, and termination of a TBF.

Consider claim 14. The nearest prior art as shown in Ariyoshi fails to teach the method of claim 1, wherein step (b) further includes an expediting procedure to more quickly determine the initial uplink transmit power of the mobile station by monitoring the quality of the first several uplink blocks sent on a temporary block flow (TBF) in order to determine if the initial uplink transmit power commanded by the base transmitter station at the start of the TBF is too low.

Consider claim 18. The nearest prior art as shown in Ariyoshi fails to teach the base transmitter station of claim 17 wherein the power control application uses BER based and block error rate (BLER)-based power step calculation techniques to determine how much to adjust the mobile station's transmit power.

Consider claim 25. The nearest prior art as shown in Ariyoshi fails to teach the base transmitter station of claim 17, wherein the power control application employs no

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timers, but is driven or initiated by at least one external event selected from the group comprising temporary block flows (TBF), receipt of an uplink block of data, transmission of a packet uplink acknowledgement/negative acknowledgement message, transmission of a TBF reassignment message, and termination of a TBF.

Consider claim 26. The nearest prior art as shown in Ariyoshi fails to teach the base transmitter station of claim 17, wherein the power control application includes an expediting procedure to more quickly determine the initial uplink transmit power of the mobile station by monitoring the quality of the first several uplink blocks sent on a temporary block flow (TBF) in order to determine if the initial uplink transmit power commanded by the base transmitter station at the start of the TBF is too low.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Weiland et al (US 5,590,408), Chang et al (US 2002/0207695), Shiu et al (US 2003/0036403) and Koo et al (US 2004/0157636) have been cited to show other mobile power control arrangements.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 703-305-4825. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for

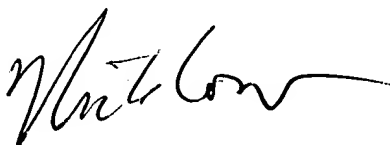
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the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip Sobutka
(703) 305-4825

August 18, 2004



NICK CORSARO
PRIMARY EXAMINER